

Summary of the Database Committee Teleconference June 10, 1998

The Database Committee of the National Environmental Laboratory Accreditation Conference (NELAC) met by teleconference on Wednesday, June 10, 1998, at 2:00 PM Eastern Daylight Time (EDT). The meeting was led by its chair, Mr. Matthew Caruso of the New York State Department of Health. A list of action items is given in Attachment A. A list of participants is given in Attachment B. *The purposes of the meeting were to: examine the data fields and database structure for the National Laboratory database; Finalize recommendations on unique laboratory identifier; and discuss the survey of the first class of accrediting authority applicants.*

INTRODUCTION

The mandate of the National Database committee is to advise the Board of Directors and EPA on two databases. One database is for the State accrediting authorities. This one is small and relatively easy to design. The other database is for the accredited laboratories. This database will be larger and more complex. EPA will need to acquire timely data in the proper format from participating state authorities and provide access to the database nationwide.

DISCUSSION

EPA Contractor. Jim Stemmler announced that he had contacted Don Worley of EPA's Enterprise Technology Support Division (ETSD) to begin the process of developing the NELAC internet database systems. Don said a person from TPMC would be contacting Jim and would need to spend half a day with him, discussing requirements. From this discussion would come a *gross statement of requirement* and a rough idea of how much the system will cost.

National Laboratory database design. Matt Caruso proposed a system design for the National Laboratory Database which included three tables, one each to contain information on: the laboratory itself, the individual accreditations, and accrediting authorities. The individual accreditation table would contain an enormous number of records. A record would be needed for each combination of analyte, method, matrix, program for which a lab is accredited. This table would contain short codes which link to lookup tables for methods (4 char), analytes (5 char), EPA program (2 char) and status (1 char). The generation of these records can likely be automated when a lab is accredited for whole sets of methods, e.g., inorganic chemistry methods for drinking water. The national laboratory database would not keep historical information. A lawyer would not be able to find out if a particular lab were accredited for a particular analyte using a particular method in accordance with a particular EPA program on a particular date. The primary accrediting authorities would be expected to provide this information. The loss of accreditation could be accommodated by either deleting the accreditation record or by changing the code in the status field.

Survey. Matt Caruso and Jeri Long reported that half of the first class of applicants for recognition of accrediting authority did not have a database system. In particular, WV, DE, TX, and AR had no automated databases, NH, CA, UT, and CO did have computerized databases, and OR was between systems. Typically, large states, e.g., NY and FL, have old systems. Other states are just now

developing systems, e.g., CT. This finding raises an issue that needs to be resolved by the NELAC BOD or other technical committees, namely, should NELAC require states to have the capability of providing their data in electronic format. Which suggests that we will want to be able to advise some States on how to develop systems using off-the-shelf software and how to transmit data electronically in a format that the national database system can read. Matt believes that states should develop their own systems and not rely on the national database to supply all its information storage and retrieval needs. Steve Arms disagreed stating that if the national system were made useful, a state database would not be necessary.

Unique Laboratory ID. The committee reached closure on its recommendation for the unique laboratory ID. The first primary accrediting authority to accredit a laboratory will develop the unique identifier code for that lab. Subsequent primary and secondary accreditors would use the labs unique identifier. A field of some 13 characters will be needed for this unique ID, the first three of which will identify the accrediting authority, and the last 10 of which will identify the laboratory. This latter identifier could be as simple as a serial number, or it could encode any number of things, including the state in which the laboratory is physically located. The specifics are left to the individual accrediting authority. The only requirement is that each identifier be unique within their system. The first three characters -- the accrediting authority ID -- are assigned by the NELAP program. In the case of a state accrediting authority, the first two characters will be the 2-character state code, NY, FL, KY, WV, OR etc. The third character will designate the accrediting authority within that state, recognizing that some states will have more than one accrediting authority. In the case of Federal Agencies, NELAP will devise 2-character codes for the various agencies and use them for the first two characters. The third character, as with the states, will be used to identify the group within the Agency that has the accrediting authority. Some examples of possible 2-character codes can be found in the following table.

Agency	2-character code
DOE	EN
DoD	DD
USGS	GS
USACE	AC
USDA	DA

The Agency 2-character codes cannot duplicate any State code. For instance, we could not use DE for DOE, since DE stands for Delaware.

Agenda for San Antonio. The goal of the National Database committee meeting is to get feedback from the user community. On the agenda will be 3 presentation to stimulate discussion. Jim Stemmler will present the strawman design for the accrediting authority database. Matt Caruso will present the strawman design for the laboratory database. And John Dineen, the designer of the new CT system, will discuss his state's system.

SUMMARY

- The committee expects to contact one of the EPA's support contractors soon to begin the process of developing the database/internet system.
- At present, the committee envisions a laboratory database system with three main tables and several lookup code tables.
- Recommendations for the unique laboratory identifier are final: A 13 character code, the first three of which identify the initial primary accreditor, and the last 10 of which identify the lab uniquely within that primary accreditor's system.
- Several members of the first class of state accreditation authority applicants have no database system at all, raising the question: "Should such a system be required?"
- The next meeting of the committee will be at NELAC 4 in San Antonio. Subsequent conference calls will be scheduled after this meeting.

ACTION ITEMS
National Database Committee Teleconference
June 10, 1998

Item No.	Action Item	Date to be Completed
1.	Jim Stemmler will suggest that EPA's technical support person attend the San Antonio meeting. If the person will attend, Jim will advise the committee.	25 June 98
2.	John Dineen, the designer of CT's database system, will make a presentation at San Antonio	The exact time of the National Database session is unknown. Range: 29 June to 2 July 98.

PARTICIPANTS
National Database Committee Teleconference
April 29, 1998

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